

...MARCH 2012 REGIONAL CLIMATE SUMMARY...

SUMMARY FOR THE SAN FRANCISCO BAY AREA AND MONTEREY BAY AREA...

MORE THAN 7000 DAILY RECORD HIGH TEMPERATURES WERE BROKEN ACROSS THE COUNTRY DURING THE MONTH OF MARCH...AND THIS PAST MONTH WAS THE WARMEST MARCH ON RECORD FOR THE CONTIGUOUS UNITED STATES. HOWEVER...MOST OF THAT RECORD HEAT OCCURRED ACROSS THE EASTERN TWO-THIRDS OF THE NATION WHERE A PERSISTENT UPPER LEVEL RIDGE WAS THE DOMINANT WEATHER FEATURE. FOR MUCH OF MARCH A TROUGH OF LOW PRESSURE PERSISTED UPSTREAM FROM THAT RIDGE. THE TROUGH WAS OFTEN LOCATED NEAR THE WEST COAST...RESULTING IN SEVERAL DAYS OF COOL AND WET WEATHER ACROSS THE SAN FRANCISCO BAY AREA AND MONTEREY BAY AREA.

EVEN THROUGH MARCH WAS GENERALLY COOL AND WET ACROSS THE REGION...THE MONTH WAS NOT WITHOUT WARM WEATHER. THE FIRST WEEKEND OF MARCH WAS QUITE WARM AND A FEW DAILY RECORD HIGHS WERE SET ON SUNDAY THE 4TH WHEN TEMPERATURES CLIMBED INTO THE LOWER 80S NEAR THE NORTHERN PART OF MONTEREY BAY AND ALSO IN THE SALINAS VALLEY. A COUPLE OF ADDITIONAL BRIEF WARM-UPS OCCURRED DURING THE MONTH...ON THE 8TH AND 9TH AND AGAIN ON THE 21ST. BUT UNSETTLED WEATHER DURING MUCH OF THE SECOND TWO-THIRDS OF THE MONTH...WITH CONSIDERABLE CLOUD COVER AND PERIODIC RAINFALL...KEPT DAYTIME TEMPERATURES ON THE COOL SIDE OF NORMAL ACROSS MOST OF THE REGION. AVERAGE HIGHS FOR THE MONTH WERE WELL BELOW NORMAL IN THE NORTH BAY...SLIGHTLY BELOW NORMAL ACROSS THE REST OF THE SAN FRANCISCO BAY AREA...AND NEAR NORMAL TO EVEN SLIGHTLY ABOVE NORMAL NEAR MONTEREY BAY. AVERAGE LOW TEMPERATURES WERE NEAR TO SLIGHTLY BELOW NORMAL.

THE FIRST TWELVE DAYS OF MARCH WERE FAIRLY DRY WITH JUST A FEW LIGHT RAIN EVENTS. MOST OF MARCH'S RAINFALL OCCURRED FROM THE 13TH ONWARD. A BROAD UPPER LEVEL TROUGH DEVELOPED NEAR THE WEST COAST BY MARCH 12TH AND THEN REMAINED NEARLY STATIONARY FOR THREE DAYS. MOIST SOUTHWESTERLY FLOW FROM THE 13TH THROUGH THE 15TH RESULTED IN SIGNIFICANT RAINFALL FROM SAN FRANCISCO AND OAKLAND NORTHWARD...AND ALSO IN THE SANTA CRUZ MOUNTAINS. THE TROUGH PUSHED TO THE SOUTHEAST ON THE 16TH AND 17TH AND FINALLY PRODUCED SOAKING RAINS ACROSS THE REMAINDER OF THE REGION. RAIN TOTALS FOR THE FIVE DAYS FROM MARCH 13 THROUGH 17 VARIED CONSIDERABLY ACROSS THE AREA...WITH SIGNIFICANT OROGRAPHIC RAINFALL ENHANCEMENT HAVING OCCURRED ON SOUTHWEST-FACING COASTAL SLOPES. FOR EXAMPLE...A COUPLE OF REMOTE RAIN GAGES IN THE SANTA CRUZ MOUNTAINS NEAR BEN LOMOND AND BOULDER CREEK PICKED UP BETWEEN 16 AND 20 INCHES OF RAIN OVER THOSE FIVE DAYS. BUT IN SAN JOSE...A MERE 25 MILES TO THE NORTHEAST ON THE DOWNSLOPE SIDE OF THE SANTA CRUZ MOUNTAINS...ONLY TWO-THIRDS OF AN INCH OF RAIN FELL DURING THOSE SAME FIVE DAYS. BELOW IS A LIST OF RAINFALL TOTALS FOR SELECT LOCATIONS FROM MONDAY NIGHT MARCH 12 THROUGH SATURDAY AFTERNOON MARCH 17:

LOCATION	AMOUNT (INCHES)
----------	-----------------

SCOTT CREEK (SANTA CRUZ MTNS)...	19.96
BEN LOMOND RAWLS.....	16.31
KENTFIELD.....	11.17
BEN LOMOND.....	9.83
MOUNT SAINT HELENA.....	7.95
BOULDER CREEK.....	7.13
POINT REYES STATION.....	7.08
HEALDSBURG.....	6.23
SAN RAFAEL.....	6.00
SAINT HELENA.....	5.80
WOODSIDE.....	5.63
CALISTOGA.....	5.31
THREE PEAKS (SANTA LUCIA MTNS)...	5.48
NAPA.....	5.37
SANTA ROSA.....	4.92
PACIFICA.....	4.91
SANTA CRUZ.....	4.48
OAKLAND MUSEUM.....	4.21
SAN FRANCISCO DOWNTOWN.....	2.95
REDWOOD CITY.....	2.72
CONCORD.....	1.97
SALINAS.....	1.64
MONTEREY NWS.....	1.40
CARMEL VALLEY.....	1.31
GILROY.....	1.19
LIVERMORE AIRPORT.....	0.85
SAN JOSE.....	0.66

SEASON-TO-DATE RAINFALL TOTALS PRIOR TO MARCH 13 HAD BEEN ONLY 25 TO 45 PERCENT OF NORMAL (PON) IN THE SAN FRANCISCO BAY AREA AND ABOUT 50-60 PON NEAR MONTEREY BAY. BY THE 18TH...SEASON-TO-DATE TOTALS HAD INCREASE TO OVER 50 PON AT ALL SAN FRANCISCO BAY AREA LOCATIONS...EXCEPT NEAR SAN JOSE WHERE TOTALS WERE STILL MIRED AT ONLY 30 PON. NEAR MONTEREY BAY...SEASON-TO-DATE TOTALS HAD INCREASED TO NEARLY 70 PON BY THE 18TH.

AFTER A FEW DAYS OF DRY WEATHER FROM THE 19TH THROUGH THE 22ND...WET WEATHER RETURNED TO THE REGION BY THE 23RD AS A DEEP TROUGH DEVELOPED OFF THE WEST COAST. PERIODS OF RAIN CONTINUED THROUGH THE 27TH AS A SECOND SYSTEM MOVED THROUGH. THE SYSTEM THAT BROUGHT RAIN TO THE REGION ON THE 27TH WAS UNREMARKABLE IN MOST RESPECTS. HOWEVER...THE HIGHER TERRAIN OF NORTHERN SONOMA COUNTY RECEIVED CONSIDERABLE RAINFALL FROM THE 27TH THROUGH THE EARLY MORNING HOURS OF THE 28TH (VENADO AND CAZADERO PICKED UP ABOUT 7 INCHES OF RAIN IN LESS THAN 36 HOURS). LOCALLY HEAVY RAIN ACROSS THE RUSSIAN RIVER BASIN CAUSED A SHARP RISE IN THE LEVEL OF THE RUSSIAN RIVER...BUT THE RIVER REMAINED WELL WITHIN ITS BANKS.

ONE MORE SYSTEM BROUGHT MODERATE AMOUNTS OF RAIN TO THE REGION ON THE FINAL DAY OF THE MONTH. MARCH RAIN TOTALS WERE MOSTLY BETWEEN 100 AND 200 PERCENT OF THE 30 YEAR MONTHLY NORMAL. RAIN TOTALS EXCEEDED 200 PERCENT OF NORMAL IN SOME OF THE WETTER NORTH BAY LOCATIONS AND ALSO AT OAKLAND AND WOODSIDE. THE DRIEST AREA WAS THE NORTHERN SANTA CLARA VALLEY...INCLUDING SAN JOSE...WHERE

MONTHLY RAIN TOTALS WERE ONLY 80 TO 90 PERCENT OF NORMAL.

WET CONDITIONS DURING MARCH HELPED PUSH SEASONAL RAINFALL TOTALS MUCH HIGHER. EVEN SO...SEASON-TO-DATE TOTALS STILL REMAINED WELL BELOW NORMAL BY THE END OF THE MONTH. AS OF MARCH 31ST SEASON-TO-DATE RAINFALL TOTALS WERE ONLY ABOUT 40 PERCENT OF NORMAL IN THE SOUTH BAY...FROM 55 TO 65 PERCENT OF NORMAL ELSEWHERE EXCEPT NEAR MONTEREY BAY WHERE THEY WERE ABOUT 70 PERCENT OF NORMAL.

A FEW OF THE STORM SYSTEMS THAT MOVED THROUGH THE REGION DURING THE SECOND HALF OF MARCH WERE QUITE COLD...PRODUCING SNOW ON THE HIGHER PEAKS. THE LICK OBSERVATORY ATOP MOUNT HAMILTON RECEIVED A FOOT OF SNOW DURING MARCH. NEARLY ALL THAT SNOW FELL ON THE 17TH...18TH AND 25TH.

...MARCH REGIONAL TEMPERATURE SUMMARY...

LOCATION	AVG HIGH	NORMAL HIGH	DEPARTURE FROM NORMAL	AVG LOW	NORMAL LOW	DEPARTURE FROM NORMAL
----------	-------------	----------------	-----------------------------	------------	---------------	-----------------------------

NORTH BAY...

CALISTOGA	62.2	67.2	-5.0	39.7	40.4	-0.7
HEALDSBURG	62.0	66.9	-4.9	39.1	43.5	-4.4
KENTFIELD	60.0	64.2	-4.2	43.3	44.4	-1.1
NAPA	63.7	66.6	-2.9	42.5	43.5	-1.0
NAPA AIRPORT	61.6	64.1	-2.5	40.5	40.2	0.3
OCCIDENTAL	56.6	61.7	-5.1	41.0	44.6	-3.6
PETALUMA	61.8	65.1	-3.3	40.1	42.3	-2.2
SAINT HELENA	62.5	66.5	-4.0	43.1	42.8	0.3
SAN RAFAEL	60.3	62.9	-2.6	43.8	45.3	-1.5
SANTA ROSA	63.1	66.6	-3.5	42.1	43.0	-0.9
SONOMA COUNTY AP	61.2	64.1	-2.9	40.3	41.5	-1.2
SONOMA	60.5	65.4	-4.9	42.3	41.8	0.5

SAN FRANCISCO PENINSULA...

HALF MOON BAY	58.9	59.9	-1.0	41.9	42.7	-0.8
PACIFICA	56.2	61.3	-5.1	44.4	48.7	-4.3
REDWOOD CITY	62.4	64.9	-2.5	43.7	44.7	-1.0
SAN FRANCISCO AIRPORT	60.0	62.1	-2.1	46.5	47.7	-1.2
SAN FRANCISCO DOWNTOWN	59.0	61.8	-2.8	47.4	48.5	-1.1
WOODSIDE	62.8	68.4	-5.6	38.8	41.0	-2.2

EAST BAY...

CONCORD	64.7	66.5	-1.8	44.8	46.4	-1.6
CONCORD AIRPORT	62.6	65.8	-3.2	43.1	45.0	-1.9
FREMONT	62.7	65.3	-2.6	45.1	46.3	-1.2
HAYWARD AIRPORT	60.6	63.7	-3.1	45.1	47.4	-2.3

LIVERMORE	63.7	65.6	-1.9	42.6	43.9	-1.3
LIVERMORE AP	62.8	64.6	-1.8	42.0	42.4	-0.4
MOUNT DIABLO JUNCTION	53.6	59.8	-6.2	39.1	41.8	-2.7
NEWARK	62.0	64.5	-2.5	45.4	47.7	-2.3
OAKLAND	62.2	63.9	-1.7	46.5	48.5	-2.0
OAKLAND AIRPORT	60.1	62.6	-2.5	44.3	46.1	-1.8

SOUTH BAY AND SANTA CRUZ COUNTY...

BEN LOMOND	66.4	67.3	-0.9	40.4	40.2	0.2
MOFFETT FIELD	63.0	65.0	-2.0	45.6	47.3	-1.7
MOUNT HAMILTON	48.2	50.4	-2.2	35.1	38.6	-3.5
SAN JOSE	63.9	65.7	-1.8	44.6	46.6	-2.0
SANTA CRUZ	65.5	66.4	-0.9	42.0	44.4	-2.4
WATSONVILLE	63.5	64.4	-0.9	41.9	43.9	-2.0
WATSONVILLE AP	64.1	62.9	1.2	44.8	43.5	1.3

MONTEREY AND SAN BENITO COUNTIES...

CARMEL VALLEY	66.1	65.8	0.3	39.6	42.1	-2.5
HOLLISTER	64.1	66.1	-2.0	41.9	42.4	-0.5
KING CITY	67.7	70.2	-2.5	41.3	42.1	-0.8
MONTEREY	60.6	60.8	-0.2	44.4	45.4	-1.0
MONTEREY AIRPORT	61.5	60.7	0.8	44.2	45.6	-1.4
PINNACLES NAT MON						
SALINAS	66.7	65.1	1.6	42.1	43.3	-1.2
SALINAS AIRPORT	65.4	64.7	0.7	44.4	44.7	-0.3

...MARCH REGIONAL PRECIPITATION SUMMARY...

LOCATION	MAR TOTAL	NORMAL MAR PRECIP	PERCENT OF NORMAL
----------	--------------	-------------------------	----------------------

NORTH BAY...

CALISTOGA	11.13	5.77	193
HEALDSBURG	9.44	6.36	148
KENTFIELD	16.24	6.56	248
NAPA	9.04	3.87	234
NAPA AIRPORT	6.69	2.50	268
OCCIDENTAL	12.49	7.42	168
PETALUMA AIRPORT	6.34	3.79	167
SAINT HELENA	10.28	5.11	201
SAN RAFAEL	10.78	4.59	235
SANTA ROSA	7.79	4.53	172
SONOMA COUNTY AP	7.67	4.98	154
SONOMA	6.98	4.39	159

SAN FRANCISCO PENINSULA...

HALF MOON BAY	5.02	4.22	119
---------------	------	------	-----

PACIFICA	8.07	4.31	187
REDWOOD CITY	6.17	3.13	197
SAN FRANCISCO			
AIRPORT	4.76	2.96	161
SAN FRANCISCO			
DOWNTOWN	5.70	3.26	175
WOODSIDE	9.62	4.29	224

EAST BAY...

CONCORD	4.28	2.53	169
CONCORD AIRPORT	3.76	2.37	159
FREMONT	2.65	2.92	91
HAYWARD AIRPORT	3.93	2.63	149
LIVERMORE	2.57	2.36	109
LIVERMORE AIRPORT	2.85	2.20	130
MOUNT DIABLO			
JUNCTION	5.37	3.52	153
NEWARK	2.41	2.34	103
OAKLAND	7.18	3.39	212
OAKLAND AIRPORT	5.88	3.08	191

SOUTH BAY AND SANTA CRUZ COUNTY...

BEN LOMOND	14.46	7.16	202
LOS GATOS	3.53	3.63	97
MOFFETT FIELD	1.97	2.26	87
MOUNT HAMILTON	6.13	4.04	152
SAN JOSE	1.98	2.54	78
SANTA CRUZ	7.38	4.63	159
WATSONVILLE	4.13	3.63	114
WATSONVILLE AP	5.08	2.78	183

MONTEREY AND SAN BENITO COUNTIES...

CARMEL VALLEY	3.33	3.07	108
HOLLISTER	2.53	2.36	107
KING CITY	2.45	2.20	111
MONTEREY	3.68	3.38	109
MONTEREY AIRPORT	3.26	2.76	118
SALINAS AIRPORT	2.60	2.26	115

...DAILY TEMPERATURE RECORDS FOR MARCH 2012...

		RECORD MAXIMUM TEMP	PREVIOUS RECORD
3/04	SANTA CRUZ	83	79 IN 1937
3/04	SALINAS	83	80 IN 1986

3/04 SALINAS AIRPORT 82 82 IN 1986

RECORD
MINIMUM PREVIOUS
TEMP RECORD

3/20 OAKLAND AIRPORT 36 38 IN 2002

...MONTHLY RANKS FOR DOWNTOWN SAN FRANCISCO...

AVERAGE HIGH TEMPERATURE.....59.0.....39TH COOLEST OUT OF 136 YEARS
AVERAGE LOW TEMPERATURE.....47.4.....39TH COOLEST OUT OF 136 YEARS
PRECIPITATION..... 5.70 IN.....21ST WETTEST OUT OF 162 YEARS

...MONTHLY EXTREMES FOR SELECT LOCATIONS...

LOCATION	WARMEST DAY(S)	COOLEST DAY(S)	WETTEST DAY(S)
SANTA ROSA AIRPORT	3/04 76 DEG	3/08 31 DEG	3/13 2.35 IN
SAN FRANCISCO	3/04 3/09 70 DEG	3/19 3/24 43 DEG	3/14 1.47 IN
SAN JOSE	3/04 75 DEG	3/08 37 DEG	3/16 0.58 IN
SALINAS AIRPORT	3/04 82 DEG	3/07 36 DEG	3/16 1.07 IN

NOTE: THIS CLIMATOLOGICAL DATA IS PRELIMINARY. FOR OFFICIAL
CERTIFIED CLIMATOLOGICAL DATA PLEASE CONTACT THE NATIONAL
CLIMATIC DATA CENTER AT 828-271-4800 OR <http://www.ncdc.noaa.gov>.
OFFICIAL VALUES AS DETERMINED AT THE ABOVE WEB SITE MAY TAKE
SEVERAL MONTHS FOR AUTHENTICATION AND PUBLICATION.

\$\$

DYKEMA

